

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Indra LAKSONO

Title: ADAPTIVE BANDWIDTH FOOTPRINT MATCHING FOR MULTIPLE COMPRESSED VIDEO STREAMS IN A FIXED BANDWIDTH NETWORK

App. No.: 09/823,646 Filed: March 30, 2001

Examiner: David J. CZEKAJ Group Art Unit: 2621

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Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

**REMARKS IN SUPPORT OF
THE PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Sir:

In response to the Final Office Action mailed November 20, 2006 (hereinafter “the Final Action”) and the Advisory Action mailed March 7, 2007, and pursuant to the Notice of Appeal and Pre-Appeal Brief Request for Review submitted herewith, the Applicant requests review of the following issues on appeal. In order to facilitate full consideration of the remarks filed herewith, the Applicant respectfully requests the Art Unit Supervisor designate a panel composed of at least three examiners.

Claims 42, 43, and 45-48 are directed to statutory subject matter

The Final Action rejects claims 42, 43, and 45-48 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In particular, the Final Action asserts that these claims are non-statutory because they allegedly “have improper language regarding the computer readable medium” and the Office cites pages 50-57 of the “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (hereinafter, “the Interim Guidelines) in support of this assertion. *Final Action*, p. 2. In the Response to the Final Action mailed January 22, 2007 (hereinafter, “the Final Response”), the Applicant noted that the Final Action failed to specify the particular language of claims 42, 43, and 45-48 which the Office finds objectionable and why it is objectionable and the Office therefore failed to meet its burden in establishing a *prima facie* case in establishing this rejection.

Responding to these remarks, the Advisory Action states that the Interim Guidelines, Annex IV, section (a) “discloses that computer readable mediums encoded with (*stored thereon*, embedded wit, or *embodiment*) a computer program would [need to] be recited in the claim in order to be considered statutory. Linking words such as including comprising, listing, and having are not acceptable as a substitute term for ‘encoded with.’” *Advisory Action*, p. 2 (emphasis added). From this assertion, the Advisory Action concludes “[t]herefore the ‘set of instructions *stored* in memory’ found in claim 42 and the ‘computer readable medium tangibly *embodiment* a set of instructions” found in claim 43 is deemed non-statutory.” *Id.* (emphasis added). As a first issue, nowhere in the Interim Guidelines, including the cited passage at Annex IV, section (a), is it stated that the language “encoded with” is required in claims directed to a computer readable medium in order for the claims to be statutory subject matter, nor do the Interim Guidelines teach that “linking words [including, comprising . . .] are not acceptable as a substitute term for ‘encoded with’” as erroneously asserted by the Advisory Action. Contrary to the assertions of the Advisory Action, the language “encoded with” does not establish statutory subject matter, whereas all other language is deemed to be de facto non-statutory subject matter. As a second issue, the Advisory Action provides the examples of “*stored thereon*” and “*embodiment*” as valid equivalents of the language “encoded with,” but proceeds to consider the subject matter of claims 42 and 43 as non-statutory even though they recite the equivalent language “set of instructions *stored* in memory” and “computer readable medium tangibly *embodiment* a set of instructions,” respectively.

Nevertheless, as discussed at pages 9 and 10 of the Final Response, 35 U.S.C. § 101 is silent as to specific language for a claim directed to a computer readable medium and the Interim Guidelines, particularly pages 50-57 as cited by the Office, fail to reveal any particular claim language that is required, or alternately prohibited, in order for a claim directed to a computer readable medium to be patentable subject matter. Turning to independent claim 42, as discussed at pages 10 and 11 of the Previous Response, the subject matter of claim 42 is directed to a system comprising “one or more data processors” and “memory operably coupled to said one or more processors,” and therefore is directed to the inclusion of the claimed set of instructions in an otherwise statutory machine (i.e., the claimed system of one or more data processors and memory). Thus, claim 42 “remains statutory irrespective of the fact that a computer program [set of instructions] is included in the claim.” *See Interim Guidelines*, p. 53. Further, the set of

instructions recited by claim 42 defines the structural and functional interrelationship between the set of instructions, the claimed one or more processors, and the claimed memory, and thus is statutory subject matter. *See Id.* Turning to independent claim 43, as discussed at pages 11 and 12 of the Previous Response, the subject matter of claim 43 is directed to a computer readable medium tangibly embodying a set of instructions to manipulate one or more processors to perform the functions outlined in claim 43. As stated by the Interim Guidelines, “[w]hen functional descriptive material [i.e., a computer program or set of instructions] is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.” *Id.*, p. 50; *see also Id.*, p. 53 (“a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, and is thus statutory”). Thus, claim 43 is statutory as it recites a set of instructions (e.g., a program) embodied (i.e., recorded) on a computer readable medium and thus is structurally and functionally interrelated to the medium.

Claims 1, 2, 7, 9-32, 44, and 49-54 are directed to statutory subject matter

The Final Action rejects claims 1, 2, 7, 9-41, 44, and 49-54 under 35 U.S.C. § 101 as allegedly having no tangible, concrete, and useful result. As discussed at pages 12 and 13 of the Final Response, the results achieved by the claimed inventions of claims 1, 37, and 49, namely a compressed display stream/multimedia channel having reduced data, are “useful, tangible, and concrete” and thus claims 1, 37, and 49 meet the statutory requirement of § 101. In response to these comments in the Final Response, the Advisory Action states that the Applicant’s specification teaches that “the medium is a carrier wave/signal” and because a “signal has no physical structure” the claim is non-statutory. None of independent claims 1, 37, or 49 recite, make reference to, or incorporate “a medium” in any manner and thus the Office’s statement that the specification teaches that “the medium is a carrier wave/signal” has absolutely no bearing on whether the claimed subject matter of these claims produces a useful, tangible and concrete result. Accordingly, the Office’s erroneous and unsupported interpretation of “a medium” as being only “a carrier wave/signal” has no effect on the interpretation of the subject matter of these claims. Further, contrary to the assertions of the Office Action, the medium referenced by the cited passage of the specification refers to the medium used to transfer instructions within an

image processing system, rather than a computer readable medium that tangibly embodies the instructions (stores the instructions). *Present Disclosure*, p. 11, lines 3-12.

Banks, Gupta and the other cited references fail to disclose or suggest each and every feature of the pending claims

The Final Action rejects the pending claims under 35 U.S.C. § 103(a) as being unpatentable over the combination of Banks (U.S. Patent No. 6,139,197) and Gupta (U.S. Patent No. 6,985,966), in addition to other references for certain claims. As discussed at pages 14 and 15 of the Final Response, the proposed combination of Banks and Gupta and the other cited references fails to disclose or suggest each and every feature of independent claims 1, 42, 43, and 49. The Final Action acknowledges that Banks “fails to disclose the plurality of streams being sent to a plurality of display devices” but asserts that because Banks discloses “sending a stream from a server to a client via a network,” it would have been obvious “to send a plurality of streams to a plurality of clients since a network hosts a plurality of clients.” *Final Action*, p. 3. The Final Action further acknowledges “Banks fails to disclose selecting a display stream as claimed” and thus turns to Gupta as allegedly teaching these features. *Id.*, p. 4. As discussed at page 14 of the Final Response, Banks fails to disclose a plurality of display streams, much less selecting a display stream of a plurality of display streams and compressing the selected display stream in response to its selection as provided by the claims. Likewise, while Gupta teaches selecting a stream from a plurality of streams, it is for the purpose of selecting a time shifted stream to alter the timeline presentation of the media stream for resynchronization purposes and Gupta does not disclose, or even suggest, that the select stream of the plurality of streams is then compressed in response to its selection. Thus, as neither Banks nor Gupta discloses, or suggests, the compression of a display stream that has been selected from a plurality of display streams, the proposed combination of Banks and Gupta necessarily fails to disclose or even suggest features of “selecting a first display stream of the first plurality of display streams when it is determined that the first representation of the display data does not meet the predetermined criteria” and “compressing the first display stream in response to selecting the first display stream” as recited by claim 1 and the similar features recited by claims 42 and 43.

With respect to claim 49, the Final Action states “claims . . . 49-52 and 54 differ from claim 1 in that claims . . . 49-52, and 54 further require matching a predicted transmission time with an actual transmission time.” *Final Action*, p. 4. It has been repeatedly noted (see page 17 of the

Final Response and the Response filed August 28, 2006) that the requirement of matching a predicted transmission time with an actual transmission time is not present in the claimed subject matter of claim 49. Further, it is noted that the Final Action fails to address the particular combination of features recited by claim 49 and therefore fails to establish a *prima facie* case of obviousness with respect to claims 49-52 and 54. Moreover, as discussed at page 17 of the Final Response, none of Banks, Gupta or Bixby discloses or suggests compressing at least one multimedia channel of a plurality of multimedia channels in a data stream to generate a compressed data stream and then determining whether the resulting compressed data stream meets a predetermined criteria as provided by claim 49.

There is no motivation to combine Banks and Gupta as proposed

The Office asserts that the motivation for adding the processing taught by Gupta to the apparatus disclosed by Banks is to “obtain an apparatus that operates more efficiently by keeping data sent to a client synchronized.” *Final Action*, p. 4. The Office alleges that Gupta teaches the desirability of synchronicity. As discussed at page 15 of the Final Response, there is no motivation to combine the teachings of Banks and Gupta as proposed. Banks fails to disclose or suggest any need or desire for synchronicity. Further, the Final Action fails to provide establish how the use of the teachings of Banks (which is directed to “automatically forwarding snapshots created from a compressed digital video stream”) would be aided by Gupta’s alleged goal of “operating more efficiently by keeping data sent to a client synchronized.” In fact, not only does the Final Action fail to advance any theory or rationale, the modification of Banks in view of Gupta in fact fails to result in a more efficient operation as one of ordinary skill in the art will appreciate that the time-shifting synchronization approach of Gupta does not have direct application to the video delivery system of Banks.

Conclusion

For at least the reasons set forth above, reconsideration and withdrawal of the pending rejections is respectfully requested.

Respectfully submitted,

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